

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. – 49. (Cancelled)

50. (Currently Amended) A method of treating a local inflammatory condition ~~by topical application of skin or mucosa~~, the method comprising topically administering to a mammal in need thereof a therapeutically effective amount of an active enamel substance.

51. (Previously Presented) A method according to claim 50, wherein the active enamel substance is selected from the group consisting of enamelin, amelogenin, non-amelogenin, praline-rich non-amelogenin, amelins, tuftelins, and derivatives thereof and mixtures thereof.

52. (Previously Presented) a method according to claim 50, wherein the active enamel substance has a molecular weight of at the most about 120 kDa, as determined by SDS Page electrophoresis.

53. (Previously Presented) A method according to claim 50, wherein the amount of active enamel substance applied is an amount of total protein per cm² corresponding to from about 0.01 mg/cm² to about 20 mg/cm.

54. Cancelled

55. Cancelled

56. (Previously Presented) The method according to claim 51, wherein said amelin is ameloblastin or sheathlin.

57. Cancelled

58. Cancelled

59. (Previously Presented) The method according to claim 50, wherein the local inflammation is of the oral cavity.

60. Cancelled.

61. (Currently Amended) The method according to claim ~~60~~ 50, wherein the mucosa is selected from oral, buccal, nasal, aural, rectal and vaginal mucosa.

62. (Previously Presented) The method according to 50, wherein the active enamel substance is provided on or in a bandage, dressing, drench, patch, sheet, plaster, pad, soap, stick, sponge, transdermal delivery system, or denture.

63. (Previously Presented) The method according to claim 50, wherein the active enamel substance is provided in a delivery device, spray, aerosol, shampoo, or enema.

64. (Previously Presented) The method according to claim 50, wherein the active enamel substance is provided as an implant or a coating of the implant.

65. (Previously Presented) The method according to claim 50, wherein the active enamel substance comprises a peptide comprising at least one sequence element selected from the group consisting of Asp-Gly-Glu-Ala, Val-Thr-Lys-Gly, Glu-Lys-Gly-Glu, and Asp-Lys-Gly-Glu.

66. (Original) The method according to claim 65, wherein the active enamel substance further comprises an amino acid sequence comprising a consecutive string of 20 amino acids at least 80% identical with a string of amino acids of the same length obtained from a polypeptide comprising SEQ ID NO. 1, amino acids 1 to 103 of SEQ ID NO. 1, or amino acids 6-324 of SEQ ID NO. 2.

67. (Previously Presented) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 100 kDa.

68. (Previously Presented) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 90 kDa.

69. (Previously Presented) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 80 kDa.

70. (Previously Presented) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 70 kDa.

71. (Previously Presented) The method according to claim 52, wherein the active enamel substance has a molecular weight of at the most about 60 kDa.

72. (Previously Presented) The method according to claim 53, wherein the active enamel substance is from about 0.1 mg/cm^2 to about 15 mg/cm^2 .